



Faculty of Economics and Business

**Application of Extended Theory of Planned Behaviour on
Millennials' Green Purchase Intention**

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**Doctor of Business Administration
2023**

Application of Extended Theory of Planned Behaviour on
Millennials' Green Purchase Intention

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A dissertation submitted

In fulfillment of the requirements for the degree of Doctor of Business Administration

Faculty of Economics and Business
UNIVERSITI MALAYSIA SARAWAK
2023

DECLARATION

I declare that the work in this thesis was carried out in accordance with the regulations of Universiti Malaysia Sarawak. Except where due acknowledgements have been made, the work is that of the author alone. The thesis has not been accepted for any degree and is not concurrently submitted in candidature of any other degree.

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ACKNOWLEDGEMENT

Firstly, I would like to thank my supervisor, Dr. Norazirah bt Hj Ayob, for her expertise and guidance throughout the process of conducting this dissertation, without which it would be difficult to achieve.

Next, I would extend my gratitude towards my family and friends for their unceasing support along this journey, especially my parents, who have shown endless compassion and understanding.

And lastly, not forgetting the numerous people who have willingly sacrificed their time to help answer the questionnaires which have contributed to the data pool of this study.

ABSTRACT

This dissertation is conducted to examine the factors that have an impact on millennials' green food product purchase intentions. Hence, this study uses an extended theory of planned behaviour to determine if millennial green purchase intentions has been impacted in a post-COVID economy. The target of this study are Malaysian millennials, and a total of 400 respondents have willingly volunteered their time to fill out the questionnaire. The data collected in this study was analysed using the SmartPLS program, and showed that factors of attitude, perceived behaviour control, environmental concern, and environmental knowledge have a significant impact on Malaysian millennials' green food product purchase intention. However, this study also found that subjective norms do not have a significant impact on millennials' green food product purchase intention. The implications of this study are that Malaysian millennials intentions of purchasing green food products are based on their positive associations of the importance of preserving the environment, hence businesses and policymakers should create advertisements or campaigns that appeal to their concern for the environment to encourage more millennials to consume green food products.

Keywords: Millennial, theory of planned behaviour, green food product purchase intentions

ABSTRAK

Disertasi ini dikaji untuk mengkaji faktor-faktor yang mempengaruhi niat membeli milenial terhadap produk makanan hijau. Justeru, kajian ini menggunakan teori lanjutan tingkah laku terancang untuk mengetahui sama ada niat membeli produk makanan hijau milenial telah dipengaruhi dalam ekonomi pasca-COVID. Kajian ini dilakukan atas golongan milenial Malaysia, dan sebanyak 400 orang responden telah mengisi soal selidik secara sukarela. Data yang dikumpul telah dianalisis mengguna program SmartPLS, dan menunjukkan bahawa faktor sikap, tingkah laku kawal, keprihatinan alam sekitar, dan pengetahuan alam sekitar mempunyai impak signifikan terhadap niat membeli produk makanan hijau golongan milenial Malaysia. Namun begitu, kajian ini juga telah mendapati bahawa norma subjektif tidak mempunyai kesan yang signifikan terhadap niat membeli produk makanan hijau. Implikasi kajian ini menunjukkan bahawa niat membeli produk makanan hijau golongan milenial Malaysia adalah berdasarkan pengetahuan positif mereka terhadap kepentingan memelihara alam sekitar. Oleh itu, perniagaan dan penggubal dasar seharusnya membuat iklan atau kempen yang menarik perhatian mereka terhadap kepentingan menjaga alam sekitar dan menggalakkan lebih banyak golongan milenial untuk memakan produk makanan hijau.

Kata kunci: *Milenial, teori lanjutan tingkah laku terancang, niat membeli produk makanan hijau*

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LIST OF ABBREVIATIONS

AVE	Average Variance Extracted
CGS	Centre for Graduate Studies
DOSM	Department of Statistics Malaysia
EC	Environmental Concern
EK	Environmental Knowledge
PBC	Perceived Behaviour Control
PI	Purchase Intention
SN	Subjective Norms
TPB	Theory of Planned Behaviour
UNIMAS	Universiti Malaysia Sarawak

CHAPTER 1

INTRODUCTION

1.1 Introduction

Chapter 1 includes background of study, problem statement, research questions and objectives of the study, significance of study, definition of key terms, and scope of study. These sections briefly discuss millennials and their increasing preference for green food products, as well as introduce the Theory of Planned Behaviour (TPB) as a way to identify the factors that motivate millennials to purchase green food products.

1.2 Background of the Study

In recent times, the culture of consumerism, which refers to the excessive consumption and acquisition of goods and services, has increased significantly in modern times when compared to those of a decade ago. This has caused significant environmental degradation, leading to various issues such as climate change, loss of biodiversity, and depletion of natural resources. This has also resulted in unsustainable depletion of the world's natural resources and caused irreparable damage to the environment (George & Nair, 2022; Joshi & Rahman, 2015), such as global climate change and higher pollution levels, and this has even threatened the survivability of flora and fauna species (Chen & Chai, 2010). Climate change, in particular, has emerged as a pressing issue, with scientists warning of its catastrophic impacts on the planet and human societies. Countries like Malaysia are facing the negative effects of climate change (Moorthy et al., 2021). This has caused consumers to be more aware of the need to preserve the environment to safeguard their future. Consumer choices can subsequently drive demand for sustainable products and services, putting

pressure on companies to adopt more sustainable practices. As a result, businesses have become pressured by society to engage in more sustainable practices that have minimal impact on the environment (Wilmer et al., 2018).

Businesses are now producing eco-friendly products and marketing them to be beneficial for the environment (George & Nair, 2022). As such, governments around the world have begun to realise that environmental issues are a very tangible threat to humanity and have started to take steps to minimise the negative impact of human activity on the environment (Ho et al., 2020; Joshi & Rahman, 2015). One of these methods is increasing consumer awareness on the benefits of green purchasing behaviour (Djaelani et al., 2020). The increase in awareness of environmental issues over the years has been the result of extensive and far-reaching media campaigns by governments to educate their citizens (Al Mamun et al., 2018; Saeed et al., 2013), thus leading to consumers who are more environmentally conscious of their purchasing behaviour and consumers who would seek to purchase goods and services that have minimal impact on the environment (Azami et al., 2018; Laroche et al., 2001; Mishra et al., 2014; Suki, 2016). These campaigns are designed to educate citizens about the impact that their actions can have on the environment and to encourage them to take steps to reduce their environmental footprint. As such, these campaigns may include television and radio advertisements, social media campaigns, print advertisements, and other forms of media. The goal of these campaigns is to reach as many people as possible and to communicate the message that environmental issues are important and require action.

This change in consumer sensibilities, noticeably spearheaded by the younger generation of consumers, has led to a rise of ‘sustainable development’ (Joshi & Rahman, 2015). Although the term has been in use for a long time, it advocates for companies to be more sustainable and reduce over-harvesting of resources, while also promoting a business culture that is aware of the negative impact of their operations and actively works to minimise its effect on the environment. Subsequently, consumers should also be aware that their decision to buy, use, and dispose of products will likewise affect the environment (Joshi & Rahman, 2015). Hence, green products have minimal consequences on the environment (Al Mamun et al., 2020), as they are usually made of or from eco-friendly, recycled, or biodegradable materials that can be easily reused once disposed of or can be safely broken down without leaving harmful residue that threatens the environment. Thus, the more media campaigns are being carried out by both private and public organisations, the more consumers are made aware of the benefits of purchasing green products, thus increasing the likelihood of green purchase intentions. Governments around the world recognize the importance of public education in addressing these issues, and by educating their citizens about the impact that their actions can have on the environment, it is hoped that people will make more environmentally conscious choices in their daily lives.

1.2.1 The Malaysian Scenario

In this local context, Taib et al. (2022) claimed that in Malaysia, green products are difficult to find stocked in supermarkets and are comparatively more expensive than their conventional counterparts. Hence, according to the author, despite the benefits of purchasing green products, many would choose to forego changing their purchasing behaviour to specifically buy green products and instead choose to remain loyal to their current brands of services or products. This demonstrates that part of the reluctance of Malaysians to purchase green products is the perception that green products are expensive. Many Malaysians believe that green products are priced higher than their conventional counterparts, which makes them unaffordable for most people. This perception is partly due to the fact that green products are often associated with premium pricing, which can serve as a deterrent for price-sensitive consumers.

Additionally, the lack of availability of green products in certain areas or stores may also contribute to this perception. In past studies, Noor et al.'s (2012) study on green product purchases showed that Malaysians have little experience with purchasing green products, with only 30% of respondents affirming that they have done so. This sentiment is shared by Al Mamun et al. (2018), who argue that part of the reason why Malaysians do not practice green consumerism in their daily lives is due to their ignorance of the benefits of purchasing green products. They are unaware of the benefits of using green products or how they can contribute to environmental protection through green consumerism.

The very idea of being environmentally friendly is still a relatively new concept for Malaysians (Rahman, 2018), and both the government and private sector have conducted extensive campaigns to bring awareness to Malaysians (Zahari & Esa, 2019). Some of the more prominent examples include supermarkets such as Giant and Aeon that have implemented 'No Plastic Bag Days' (Tang, 2014; Zahari & Esa, 2019), where customers are urged to bring their own reusable or recyclable bags to carry groceries instead of being supplied plastic ones at the cashier checkout. Additionally, green products may also include things such as having a sustainably built house that minimises resource waste. Hence, Penang-based real estate developer IJM Land has launched an environmentally sustainable real estate project dubbed 'THE LIGHT Waterfront Penang', boasting advantages such as the use of eco-friendly building materials, state-of-the-art ICT infrastructure, as well as water and energy-saving technologies to help its homeowners reduce waste (Tang, 2014).

Therefore, it can be seen that even though some Malaysian companies are playing their part in promoting and encouraging green consumerism among the public, there are still factors that prevent Malaysian consumers from doing so, such as green products not being widely available in supermarkets or being more expensive than conventional products. Thus, this study is conducted in a local context to identify the factors that have the most significant impact on influencing Malaysian millennials to choose to buy green food products.

1.3 Problem Statement

It can be seen that the global organic food market has grown more than six times its value, from USD 17.9 billion in 2000 to USD 114 billion in 2018 (Schlatter et al., 2020), while the environmentally friendly and sustainable food market is forecast to grow even further beyond 2021 to 2028, reaching an estimated value of USD 170.5 billion by 2028 (Data Bridge Market Research, 2021). This shows that there is tremendous growth and opportunity for businesses to consider entering the green food product industry. Nowadays, consumers are drawn to organic food products or green food products simply due to the perception that they are a safe and healthy food option that is also beneficial to the environment (Janssen, 2018; Latip et al., 2020). This is because the advent of the coronavirus (COVID-19) pandemic in 2019 threw the world into disarray, causing heavy and unavoidable disruption in the lives of people as well as jeopardising the operation of many industries, such as production, manufacturing, and logistics, causing many vital processes to grind to a screeching halt due to travel restrictions (World Health Organization (WHO), 2020). This disruption of the supply chain has caused tremendous upheaval, causing the prices of many goods to rise due to a lack of available supply, and is especially prevalent in the case of food. As such, green food products are of interest to consumers, especially in the wake of the pandemic, as it has increased consumers' apprehension towards conventional food products, causing a higher likelihood of consumers making more health-conscious decisions and driving growth for the green food product market.

Previous research in this field have been conducted in many different regions of the world, such as the purchase intention of sustainably made clothes by Pakistani university students

(Saeed et al., 2013), the purchase intention of green products among Indian adults (Paul et al., 2016), the purchase intention of green skincare products by Taiwanese university students (Hsu et al., 2017), the purchase intention of products with green packaging among young consumers in Indonesia (Tuwanku et al., 2018), the purchase intention of green products among Iraqi university students (Abdulsahib et al., 2019), the purchase intention of green products among Chinese university students (Bhutto et al., 2019), the purchase intention of green household appliances by South African millennials (Dilotsotlhe, 2021), the intention of use of autonomous vehicles by urban Chinese citizens (Jing et al. 2019), the purchase intention of green products in Indian millennials (Shukla, 2019). It can be seen that a majority of these studies conducted in countries outside of Malaysia rarely distinguish between green products and do not make a distinction between large machines, such as household appliances, household supplies such as laundry detergent or soap, or green food to be consumed by an individual. Hence, it is difficult to determine if the factors influencing the purchase intention can be specifically identified for green food products. Furthermore, a significant portion of these studies also use university students to serve as the respondent pool, possibly due to the ease of access to a large sample size. However, this methodological gap also causes limitations in deciphering the results of the study, as university students may not accurately represent the buying power of the population of a country and may not have the ability to purchase green products despite expressing concerns about the environment and wishing to do their part in promoting consumption of green food products. Therefore, this study will attempt to address this gap by extending the age range of respondents, as this study will gather data from millennials, which represent a wider age group.

Meanwhile, past studies conducted in Malaysia include the study of factors influencing Malaysian consumers' intention to purchase products with green packaging (Moorthy et al., 2021; Rajendran et al., 2019). Jaini et al. (2020) used the value-belief-norm (VBN) theory to investigate Malaysians' purchase behaviour of green cosmetics. Additionally, Tan et al. (2019) examined the general view of Malaysian millennials' green product buying behaviour, while Alam et al. (2019) and Teoh et al. (2022) have looked specifically into Malaysians' purchase intention of green or energy-efficient household appliances. Furthermore, past studies have shown that elements of the theory of planned behaviour have a significant positive impact on purchase intention, such as academic staff from Universiti Teknologi Mara in the states of Kedah, Pulau Pinang, and Perlis (Salleh et al., 2010), Pakistani university students (Ali et al., 2011), working-class individuals in Klang Valley, Malaysia (Tang, 2014), and low-income households in the coastal regions of Peninsular Malaysia (Al Mamun et al., 2018).

Hence, it can be assumed that Malaysians' purchase intention, especially towards green food products, may have been impacted by the COVID-19 pandemic, as evidenced by the Department of Statistics Malaysia (DOSM) reporting that the purchasing power of Malaysian households dropped by 16.7% in 2020 (The Edge Markets, 2021). Therefore, this study assumes that consumer beliefs may have changed significantly since then, especially after globally significant events such as the COVID-19 pandemic, causing consumers to be more mindful about their health and more selective in their consumption of food. Based on the studies mentioned, there exists a contextual gap, whereby there have been studies into other green products conducted in a Malaysian context; however, studies into green food products in Malaysia are few and far between and mostly outdated.

Despite the many benefits of green food products, there is a gap in research into this area, especially in a post-COVID world. In this setting, consumer behaviour is not yet fully understood, and buying power may have diminished as compared to the economic situation before the pandemic (The Edge Markets, 2021). In the food industry, green products are becoming more popular as consumers seek to reduce their environmental impact through their purchasing choices (Azami et al., 2018; Laroche et al., 2001; Mishra et al., 2014; Suki, 2016). Additionally, the rise of environmental concerns and the increasing demand for sustainable products have led to a growing interest in understanding consumers' purchase intentions towards green food products. As time passes, these concerns about environmental sustainability have become increasingly important to consumers, particularly millennials. Millennials are currently the largest consumer group, and Butler (2018) notes that social and environmental factors frequently influence their purchasing decisions. Therefore, millennials as a market segment would have undeniable sway in determining consumer purchase intentions for years to come, and it would be in the best interests of businesses to determine what drives millennials to purchase and consume green food products. There is also a gap in the current body of knowledge, as similar studies in the vein of examining factors influencing Malaysian consumers' purchase intention of green food products have been conducted prior to the pandemic (Phuah et al., 2011; Tan & Mariadass, 2019; Thambiah et al., 2015), and this is considered outdated for the purposes of this study. The studies conducted in a Malaysian context are fairly outdated, having been conducted for almost 10 years, whereas newer studies are focused on a specific niche unrelated to food, such as Penangites' purchase intention of green home appliances in the case of Teoh et al. (2022). Therefore, it can be summarised that none of the aforementioned studies have used an extended TPB model using environmental concern and environmental knowledge as

antecedents in predicting millennials' green food product purchase intention. Hence, the specific problem statement of this study is to identify how the factors in the proposed extended TPB model will impact Malaysian millennials' green food product purchase intention.

Furthermore, businesses should place greater importance on how social influence can affect the decision-making process of individuals and how this may affect their purchase intentions for products and services. Wilmer et al. (2018) inferred that societal pressure, such as those from activists or environmental groups, is among the strongest factors pushing for companies to be more environmentally friendly in their business practices and to minimise the impact of corporate activities on the environment, and that climate change would have negative consequences for all parties involved (Chen & Chai, 2010; Moorthy et al., 2021).

Hence, this study attempts to address this gap by investigating the factors that influence green food product intentions. Despite the availability of green food products in the Malaysian market, the actual purchase intention of millennials towards these products is not well understood. Businesses are cautious about taking the next step and are unable to properly advertise and market green food products to consumers, and this may result in losses for the business due to the higher costs associated with green food products. This has caused businesses selling green food products to be unsure of the current economic situation and hesitant in marketing their products to consumers. Thus, they may miss out on a considerable amount of profit due to the positive increase in consumer perception of green food products.

1.4 Research Questions

By extending the Theory of Planned Behaviour (TPB) with the additional constructs of environmental concern and environmental knowledge, this study aims to answer the following questions:

- What is the impact of attitude on the green food product purchase intentions of millennials?
- What is the effect of perceived behaviour control on the green food product purchase intentions of millennials?
- What is the result of subjective norms on the green food product purchase intentions of millennials?
- What is the influence of environmental concern on the green food product purchase intentions of millennials?
- What is the impact of environmental knowledge on the green food product purchase intentions of millennials?

1.5 Research Objectives

1.5.1 General Objectives

This study aims to find out whether an extended theory of planned behaviour can explain millennials' green food product purchase intention.

1.5.2 Specific Objectives

- To investigate the impact of attitude on the green food product purchase intentions of millennials.
- To analyse the impact of perceived behaviour control on the green food product purchase intentions of millennials.
- To explore the effect of subjective norms on the green food product purchase intentions of millennials.
- To research the influence of environmental concern on the green food product purchase intentions of millennials.
- To examine the impact of environmental knowledge on the green food product purchase intentions of millennials.